

REMARKS

This Amendment duplicates the Amendment filed on October 27, 2007 except that Applicant has replaced the respective strikethroughs of the words “the” in claim 5, the number “4” in claim 9 and the number “13” in claim 18 with double brackets in order to indicate their respective deletions. Applicant respectfully suggests that neither the word “the” nor the number “13” required double brackets as both were clearly deleted using the strikethrough method. Applicant regrets inadvertently forgetting to bracket the deletion of the number “4”.

Claims 1-3, 5-12 and 14-29 are pending in this application following the entry of this amendment. Claims 4, 13 and 30-35 have been cancelled herein. Claims 1-2, 5, 9-11, 14, 18-19, 23 and 27-29 have been amended. No new matter has been added. Applicant submits that all of the pending claims are in condition for allowance. Applicant respectfully requests reconsideration of the outstanding rejections and allowance of all pending claims in view of the reasons set forth below.

I. Claim Rejections

Claims 1-5, 9-14, 18-29 and 31-34 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Farrell et al. (U.S. Patent 6,269,475; hereafter Farrell) in view of Aptus et al. (U.S. Patent 7,114,149; hereafter Aptus), (Office Action, p. 3, § 5).

Claims 6-8, 15-17 and 30 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Farrell in view of Aptus in further view of Yang (U.S. Pub. No. 20020055891; hereafter Yang), (Office Action, p. 8, § 6).

Claim 35 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Farrell in view of Aptus in further view of Fischer (U.S. Pub. No. 20020099582; hereafter Fischer), (Office Action, p. 9, § 7).

II. Claim Amendments

Claim 1 has been amended to specify that the generated source code includes at least one comment listing a reference to a block in the block diagram model. Claim 1 has also been amended to recite that a code generation report is generated **from the generated source code**.

Claim 1 has additionally been amended to indicate that the process of generating the code generation report parses at least one comment in the generated source code and replaces the comment with a hypertext link to a corresponding element of the block diagram model. Claim 1 has also been amended to recite that the code generation report is displayed to a user.

Corresponding amendments have been made to independent claims 10, 19, 23, and 27 with the amendment of claim 27 referencing a graphical model rather a block diagram model. Dependent claims 2, 5, 9, 11, 14, 18 and 28-29 have been amended to be consistent with the amended form of their respective independent claims.

III. Claim Rejections under 35 U.S.C. § 103(a)

A. Claims 1-5, 9-14, 18-29 and 31-34

Claims 1-5, 9-14, 18-29 and 31-34 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Farrell in view of Aptus, (Office Action, p. 3, § 5). Applicant respectfully traverses this rejection.

1. Claims 1-5 and 9

Claim 1 as amended recites:

“generating source code from a block diagram model, the generated source code including at least one comment listing a reference to a block in the block diagram model;

generating a code generation report from the generated source code, the generating of the code generation report parsing the at least one comment in the generated source code and replacing the at least one comment with at least one hypertext link that refers to a corresponding element of the block diagram model; and

displaying the code generation report to a user.”

Applicant respectfully suggests that the cited combination of Farrell in view of Aptus fails to disclose or suggest all of the elements of claim 1 as amended. Applicant has amended claim 1 to indicate that the generated source code includes at least one comment listing a reference to a block in the block diagram model. Claim 1 has also been amended to indicate that the process of generating the code generation report from the generated source code parses at least one comment in the generated source code and replaces the comment with a hypertext link to a corresponding element of the block diagram model. Applicant respectfully suggests that Farrell, Aptus and the other cited references fail to disclose or suggest either (1) that the generated source code includes a comment listing a reference to a block in a block diagram model or (2) that the parsing of the listing of the generated source code replaces such a comment with a hypertext link to a corresponding element of the block diagram model as required by the elements added to claim 1. There is no suggestion in either reference of generating hypertext links based on commented references contained in generated source code.

In addition to not disclosing or suggesting the newly added claim elements, Applicant also notes that the Examiner cited Farrell as disclosing generating source code from a block diagram model (citing col. 2, lines 27-45, col. 4, lines 66-67, col. 5, lines 1-3, 16-17 and 50-64, and col. 6, lines 24-33 - Office Action, p. 2, § 5) and further cited Farrell as disclosing pointer links that associate the elements of the generated source code with an element of the block diagram model (citing col. 5, lines 50-63 - Office Action, p. 3, § 5). Applicant respectfully disagrees with both statements as Applicant notes that nowhere in the cited sections or elsewhere in Farrell does the phrase “block diagram model” appear. The Farrell reference discusses the generation of code using an “object model”, not a “block diagram model”. As noted in Applicant’s specification, a block diagram model graphically depicts mathematical relationships (which may be time-dependent) among a dynamic system’s inputs, states, parameters and outputs (see first paragraph of Background). An object model as the term is used in Farrell is not the equivalent of a graphical block diagram model as there is no discussion of the object model from which code is generated being a graphical model. Furthermore, the section that the Examiner cited as disclosing pointer links that associate the elements of the **generated** source code with an element of the block diagram and vice versa (col. 5, lines 50-63), fails to disclose a link between generated source code and the block diagram model **from which it originated** as

set forth in Applicant's claim 1. As set forth at col. 5, lines 45-50, "**From source code 11**, an object model 12 of source code 11 is created...Codeblock 13 is formed from object model 13" (emphasis added). Rather than the source code being **generated from the block diagram model** as set forth in Applicant's claim 1, the Farrell system **generates the model from the code**. The link in the codeblock is clearly not pointing back to **generated** source code since the source code in Farrell was the basis for the (object) model in the first place.

Similarly, Aptus also fails to disclose or suggest the newly added elements of claim 1. Aptus discusses generating documentation that describes source code, (Aptus, Col. 27, lines 2-3) where the documentation includes a diagram portion and a text portion, (Aptus, Col. 5, lines 44-45). Aptus discusses hypertext markup language (HTML) links between the diagram portion of the documentation and the text portion of the documentation (Aptus, Col. 27, lines 3-6). Both the diagram portion and text portion of the documentation are generated **from** a language-neutral representation of the source code (Aptus, Col. 5, lines 52-54). Thus, Aptus discusses creating first the source code, then an intermediate representation of the source code, and then the graphical and textual documentation and therefore does not discuss generating source code from a block diagram model. Aptus, therefore fails to disclose or suggest either (1) that the generated source code includes a comment listing a reference to a block in a block diagram model or (2) that the parsing of the listing of the generated source code replaces such a comment with a hypertext link to a corresponding element of the block diagram model from which it was created as required by the elements added to claim 1.

Since Farrell and Aptus, alone or in any reasonable combination, do not disclose or suggest the newly added elements of claim 1 discussed above, they also fail to teach or suggest the features of dependent claims 2-3, 5 and 9.

Claim 4 has been cancelled herein and the rejection directed to claim 4 is therefore moot.

Applicant respectfully requests the Examiner to reconsider and withdraw the rejection of claims 1-3, 5 and 9 under 35 U.S.C. § 103(a).

2. Claims 10-14 and 18-22

Independent claims 10 and 19 have been amended to include limitations corresponding

to the new limitations added to claim.

Claim 10 as amended recites:

“means for generating source code from a block diagram model, the generated source code including at least one comment listing a reference to a block in the block diagram model;

means for generating a code generation report from the generated source code, the generating of the code generation report parsing the at least one comment in the generated source code and replacing the at least one comment with at least one hypertext link that refers to a corresponding element of the block diagram model; and

means for displaying the code generation report to a user.”

Claim 19 as amended recites:

“generate source code from a block diagram model, the generated source code including at least one comment listing a reference to a block in the block diagram model;

generate a code generation report from the generated source code, the generating of the code generation report parsing the at least one comment in the generated source code and replacing the at least one comment with at least one hypertext link that refers to a corresponding element of the block diagram model; and

display the code generation report to a user.”

As discussed above, the combination of Farrell in view of Aptus, alone or in any reasonable combination, fails to disclose or suggest these limitations required by claims 10 and 19.

Claims 11-14 and 18 and 20-22 depend from claims 10 and 19 respectively and therefore incorporate all of their respective elements. Farrell and Aptus, alone or in any reasonable combination, fail to teach or suggest the features of claims 11-14 and 18 for at least the reasons argued above with respect to claim 1.

Claim 13 has been cancelled herein and the rejection directed to claim 13 is therefore moot.

Accordingly, Applicant respectfully requests the Examiner to reconsider and withdraw the rejection of claims 10-12, 14 and 18-22 under 35 U.S.C. § 103(a).

3. Claims 23-26

Independent claim 23 has been amended to recite:

a processor and

a memory,

wherein the processor and memory are configured to:

generate source code from a block diagram model, the generated source code including at least one comment listing a reference to a block in the block diagram model;

generate a code generation report from the generated source code, the generating of the code generation report parsing the at least one comment in the generated source code and replacing the at least one comment with at least one hypertext link that refers to a corresponding element of the block diagram model; and

displays the code generation report to a user.

As noted above during the discussion of claim 1, the cited combination of references do not disclose or suggest either (1) that the generated source code includes a comment listing a reference to a block in a block diagram model or (2) that the parsing of the listing of the generated source code replaces such a comment with a hypertext link to a corresponding element of the block diagram model. Accordingly, Applicant requests the allowance of claim 23. Claims 24-26 depend upon claim 23 and Applicant therefore also requests the allowance of claims 24-26.

4. Claims 27-29

Amended claim 27 recites among other things:

“providing source code identifying an element of a graphical model, the generated source code including at least one comment listing a reference to a block in the graphical model;

generating a document from the generated source code, the generating of the code generation report parsing the at least one comment in the generated source code and replacing the at least one comment with at least one hypertext link that refers to a corresponding element of the graphical model; and
displaying the document to a user.”

As noted above during the discussion of claim 1, the cited combination of references fails to disclose or suggest, among other things, the generation of source code that includes a comment listing a reference to a block in the graphical model and also fails to show the replacement of that comment with a hypertext link to a corresponding element in the graphical model. Applicant therefore requests the allowance of claim 27.

Claims 28 and 29 depend from claim 27 and, as such, incorporate each and every element of claim 27. Accordingly, Applicant respectfully requests the Examiner to also reconsider and withdraw the rejection of claims 27-29 under 35 U.S.C. § 103(a).

5. Claims 31-34

Claims 31-34 have been cancelled herein and the rejections directed to claim 31-34 are therefore moot.

B. Claims 6-8, 15-17 and 30

Claims 6-8 and 15-17 and 30 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Farrell in view of Aptus in further view of Yang, (Office Action, p. 8, § 6). Applicant respectfully traverses this rejection.

1. Claims 6-8 and 15-17

Claims 6-8 and 15-17 depend from independent claims 1 and 10, respectively and therefore incorporate each and every element of the independent claims upon which they depend. As noted, the cited combination of Farrell and Aptus fails to disclose or suggest, among other things, the generation of source code that includes a comment listing a reference to a block in the graphical model and also fails to show the replacement of that comment with a

hypertext link to a corresponding element in the graphical model as required by claims 1 and 10. Yang fails at curing the shortcomings of Farrell and Aptus regarding these claim features.

Yang discusses an electronic catalogue utilizing 3D image display to provide a researching method and researching system for interests in commercial goods, ([0001]). Yang discusses that the electronic catalogue documents may be prepared in Markup languages such as HTML, XML and SMGL, ([0078]). However, Yang fails to teach or suggest the generation of source code that includes a comment listing a reference to a block in the graphical model and also fails to show the replacement of that comment with a hypertext link to a corresponding element in the graphical model.

For at least the aforementioned reasons, Farrell, Aptus and Yang, alone or in any reasonable combination, do not disclose or suggest all the elements of claims 1 and 10. Accordingly, Applicants respectfully requests the Examiner to reconsider and withdraw the Examiner's rejection of claims 6-8 and 15-17 under 35 U.S.C. § 103(a).

2. Claim 30

Claim 30 has been cancelled and the rejection of this claim is therefore moot.

C. Claim 35

Claim 35 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Farrell in view of Aptus in further view of Fischer, (Office Action, p. 9, § 7).

Claim 35 has been cancelled and the rejection directed thereto is therefore moot.

CONCLUSION

In view of the above amendment, Applicant believes the pending application is in condition for allowance.

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Respectfully submitted,

Electronic signature: /John S. Curran/
John S. Curran
Registration No.: 50,445
LAHIVE & COCKFIELD, LLP
One Post Office Square
Boston, Massachusetts 02109-2127
(617) 227-7400
(617) 742-4214 (Fax)
Attorney/Agent For Applicant